

## ICN Backbone Migrating to State-Owned Fiber

There are few innovations that have been adopted as widely and evolved as quickly as the Internet, computer networks, and related applications. Each year, utilization on the Illinois Century Network (ICN) increases at a rate of 8% per month. Keeping up with future bandwidth needs is a primary focus for BCCS.



Accommodating future bandwidth needs may sound like a simple task. Under the current network model, BCCS relies on leasing telecommunications circuits from multiple telecommunications carriers to provide the "pipe" between network access points, also known as PoPs (Points of Presence). The PoP sites are strategically located throughout the State based on telecommunications boundaries known as LATAs (local access and transport area). Customers connect to

the backbone network at the POP site located within the same LATA. As backbone utilization grows, BCCS must procure and install higher capacity leased circuits. As the size of the circuit grows, availability becomes more limited thus affecting costs and redundancy. Even a review of historical usage data, while helpful, does not provide a complete picture of the puzzle since it does not reflect potentially exponential growth of high bandwidth, next generation applications such as:

- Distance education
- Tele-health
- Streaming video and voice applications
- Disaster recovery needs
- Shared Services
- Online collaboration applications

### So, is there a solution?

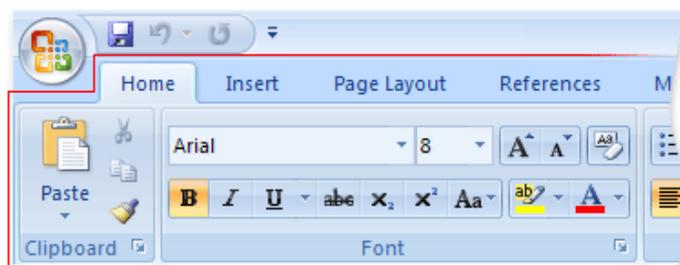
Yes...for many years BCCS network staff have been investigating and planning to migrate from the current leased circuit model to a state owned fiber model. The fiber model results in the State investing in the fiber and the optical routing equipment needed to operate the network. Once the initial investment is made, the cost to increase bandwidth capacity is significantly less than the current model of upgrading telecommunications circuits. An initial analysis indicates, that by migrating to State owned fiber, we can provide more than 10 times the amount of bandwidth at about the same operating cost.

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## Introducing... Microsoft Office 2007

The 2007 Microsoft Office system is a major release that offers many improvements and new features in response to customer needs. Changes such as the new file format and new setup architecture require thorough planning and preparation before upgrading.

The BCCS End User Computing group (EUC) is carefully evaluating the files in the Network environment, identifying potential conversion issues, and reviewing migration considerations for each program within the 2007 Office release. According to EUC Manager, Steve Washko, Office 2007 is being installed in approved pockets in several agencies on a limited capacity which include; Central Management Services, Department of Transportation and the Department of Public Health. One agency, Department of Commerce and Economic Opportunity has been fully deployed and is considered a proof-of-concept. After limited capacity installs are complete, representatives from each group will be polled for suggested configurations, settings, defaults, and ad-in components. These suggestions will be used to develop a common install package for all Microsoft Office 2007 deployments.



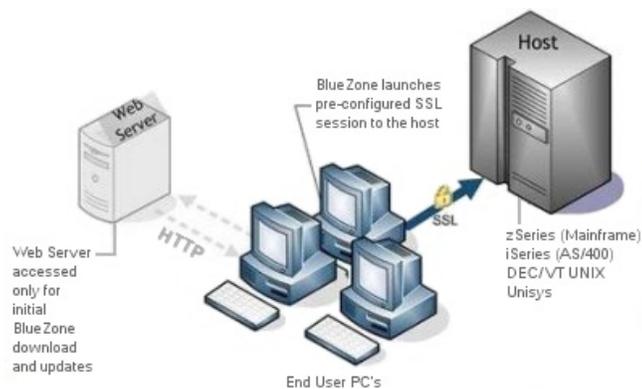
### The Microsoft Ribbon

The most significant change in Office 2007 is the user interface. The menus and toolbars have been replaced by the "ribbon," a strip of commands at the top of the screen that appear only in the context of what you are doing. The "ribbon" is designed to help you quickly find the command that you need to complete a task. Commands are organized in logical groups, which are collected together under tabs. These tabs simplify accessing application features because they organize the commands in a way that corresponds directly to the task people perform in these applications, such as writing or laying out a page.

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## Seagulls BlueZone TN3270 Emulation Software

Seagulls BlueZone® TN3270 emulation software has been selected as the enterprise standard for Telnet (TN) software as a result of an Request For Proposals (RFP) process. State of Illinois employees accessing business data hosted on the CMS Mainframes commonly use Telnet software to provide seamless access to the mainframe applications and data. CMS has used Attachmate Extra for more than 10 years along with other Telnet products; however, Seagulls BlueZone® won the RFP by meeting the State's needs and offering a significantly lower cost than the other RFP respondents.



### Seagulls BlueZone® features include:

- Enterprise TN3270 Desktop (Thick Client):
- “Green screen” look and feel.
- Supports terminal models 2 through 5 and complies with Americans with Disabilities Act section 508.
- Ability to remap keyboard to customer requirements.
- Supports authentication on the Telnet port prior to negotiating the TN3270 session.
- Provides Secure Socket Layer (SSL) for TN3270 connections and a File Transfer Protocol (FTP) client with SSL options.
- Will support Video Terminal (VT) business objects and include Macro support.
- Supports Extended High Level Language Application Programming Interface (EHLLAPI).

### Additional features for the browser:

- Foundation for third party authentication, PKI certificate.
- Provides a 128-bit encryption and a secure socket layer (SSL).
- Will allow new sessions to be launched from an existing session without launching a new browser session or reconnecting to the Web server.
- Removes footprint when session is terminated.

BlueZone® is the most widely-used replacement for older desktop-based terminal emulators on the market. BlueZone® supports both Web-to-host and desktop users in one product. Customers that do not have access to the State of Illinois network have the option of using the Web-to-host software. Please note that encryption is used to secure the 3270 traffic for the Web-to-host product. The BlueZone® emulation package is a service currently available to all CMS Data Center Mainframe clients at no additional charge.

### How does an agency request the BlueZone® TN3270 Emulation software?

1. Testing is scheduled with the RACF administrators for each client agency. Please contact Ralph Weller at 217-785-8844 to schedule BlueZone® testing.
2. During the testing period, macros will need to be converted.
3. The client agency requesting that BlueZone® be pushed to the desktops will need to submit an Enterprise Service Request (ESR) to BCCS.
4. End User Computing (EUC) will schedule the push.

For more information about the BlueZone® TN3270 Emulation service visit <http://www.bluezonesoftware.com> or contact Ralph Weller at 217-785-8844 ([ralph.weller@illinois.gov](mailto:ralph.weller@illinois.gov)) or Rita Brengenhorn at 217-785-8841 ([rita.brengenhorn@illinois.gov](mailto:rita.brengenhorn@illinois.gov)). ●

## Motorola & ISP Applauds CMS for Successful STARCOM21 Deployment



Harold Mays from BCCS receives an award for meritorious performance from ISP Colonel Greg Muller.

In the September 2007 issue of the BCCS Pulse we featured an article on STARCOM21 - a statewide wireless communications system deployed via a public-private partnership between the State of Illinois and Motorola. On September 18, 2008 the State successfully completed its statewide transition to the STARCOM21 network.

In March, a ceremony was held to recognize the completion of the STARCOM21 network. During this ceremony,

Harold Mays from BCCS was recognized by the Illinois State Police for meritorious performance in managing and coordinating the STARCOM21 project. The STARCOM21 network was built as a result of the unique relationship between the State of Illinois and Motorola to create a statewide, trunked, digital, voice 700/800 MHz radio network using a combination of existing state-owned resources such as frequencies and infrastructure and Motorola-owned or leased infrastructure such as towers, T1 lines, and microwave links. Harold served as the project manager for the STARCOM21 initiative. This system will help meet the communications and interoperability needs of the state agencies, local law enforcement, and governmental entities sharing the network.

One of the important lessons learned in the days following 9/11 was the tremendous importance of the need for first responders from different jurisdictions to have reliable and fast radio contact between law enforcement agencies, fire departments, and other responders playing a key role in executing a quality response – and possibly saving a life. STARCOM21 will help achieve this by offering first responders a single network to talk to each other effectively during an emergency situation.

For more information about STARCOM21, you may contact Harold Mays at 217-836-0190 or [harold.mays@illinois.gov](mailto:harold.mays@illinois.gov). ●

## ICN Backbone Migrating to State-Owned Fiber (continued from page 1)

### How does the State benefit?

Securing an increased level of dark fiber capability will provide the state with greater scalability. The ICN will be able to quickly increase backbone bandwidth to support constituent demands. Greater flexibility will be built into the more robust network. For example, the ability to perform dynamic traffic routing will continue to provide additional options as needed. State control of more fiber also delivers the benefit of cost savings. The return on investment is more attractive when the state is not subjected to price increases beyond its control. Strategic purchases and partnering agreements for key network segments will address this issue.

### How does the customer benefit?

Future accommodations of ICN bandwidth needs will be addressed by a three-five year phased approach to purchasing, leasing, and partnering for more fiber capability. In addition to procuring additional bandwidth as needed through vendor partners, the benefits to ICN constituents will include, but are not limited to:

- Lower cost for higher bandwidth.
- Wave services. (Customers can procure a lightwave from point A to point B, lowering their costs similar to the way outlined above.)
- Ability for customers to use the ICN for high speed transport (1Gigabit or higher).
- Ability for customers to seamlessly connect their remote sites at high speeds.
- Continued disaster recovery capability on the network backbone resulting in seamless rerouting of traffic in the event of connectivity or hardware failure in the core of the network.
- Ability to take advantage of high bandwidth, next generation applications.

In short, by controlling a greater amount of fiber the state will command greater control over its own destiny with regards to a technology that is sure to grow over time. Any questions or comments you may have about the ICN, including fiber-related questions may be directed to BCCS Network Manager Kirk Mulvany at 217-557-6526 or [kirk.mulvany@illinois.gov](mailto:kirk.mulvany@illinois.gov).

*“By controlling a greater amount of fiber the state will command greater control over its own destiny with regards to technology that is sure to grow over time”*

## Introducing... Microsoft Office 2007

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To reduce clutter, some tabs are shown only when needed. For example, the picture tools tab is shown only when a picture is selected, or you will see commands for editing a chart only if a chart appears in your Excel spreadsheet. In other words, Microsoft has implemented a new technology that lets you “browse, pick and click” to figure out what you want to do, rather than going from dialog box to dialog box. These are just a few examples of the exciting and innovative changes included in the Microsoft Office 2007 package.

Moving to Office 2007 may require some user training since the user interface has changed extensively. Capital City Center (LLCC) will be offering training for state employees if needed. Check their website at <http://www.llcc.edu/Default.aspx?alias=www.llcc.edu/cc> periodically to find out when the classes are available. For more information on this upcoming migration, please contact Steve Washko at 217-557-4682 or [steve.washko@illinois.gov](mailto:steve.washko@illinois.gov).

We suggest you ask your Intranet Administrator to include the BCCS URL [www.BCCS.illinois.gov](http://www.BCCS.illinois.gov) on your site so your customers will have an easy way to get to the BCCS site to access our Catalog, Governance site and all of our communications, forms and updates.  
**Thank you!**



## Consolidation of Production Operations Services Yields New Efficiencies

IT Rationalization has delivered many benefits for the state of Illinois. Numerous enhancements have been achieved by consolidating five similar, but disparate, agency Production Operations environments. The operations from the Department of Transportation, Department of Commerce and Economic Opportunity, Department of Healthcare and Family Services, Department of Human Services and Central Management Services are now functioning in one location.

### Some of the benefits of consolidation include:

- Production Operations is now a single operation that functions 24/7/365. The State conducts large-scale printing operations around the clock and is no longer constrained by operating only within standard business hours.
- A reduction in the overhead needed to maintain the five former locations. For example, the consolidation of large printers has freed up floor space at several agencies that are now in the process of reclaiming it for other uses.
- The State obtained a \$30,000 credit as part of a trade-in for four outdated printers and the acquisition of a new capacity printer. One of the older printers that was traded-in had aged to the point that it was no longer supported by the vendor. This new high speed printer will assist the State in keeping up with the major print volume that is generated by these five consolidated agencies.
- The ongoing cross-training of staff helps ensure that all production schedules continue to be met.

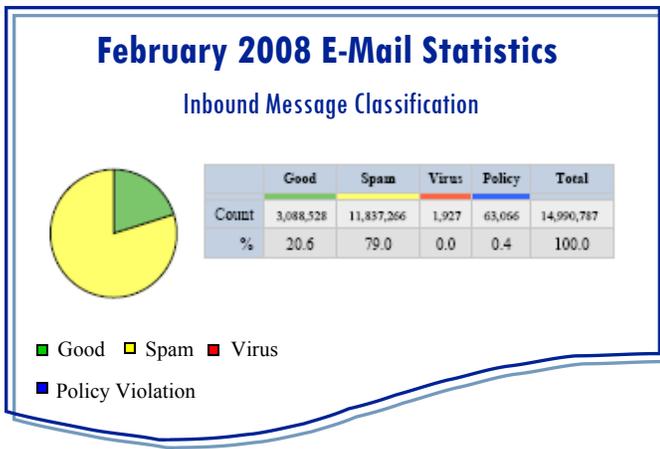
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## Iron Mail Saves You Time By Blocking Spam

In December 2007, approximately 13 million different pieces of email were sent to state agencies that have been stamped with the illinois.gov addressing scheme. Of these, roughly three million were legitimate business communications supporting state activities. The other 10 million were either spam or suspected virus carriers of attempts at phishing. For every two pieces of legitimate email you receive, IronMail has already blocked eight pieces of junk mail!

Any state agency that uses the illinois.gov address is now routed through IronMail. Several agencies have been able to eliminate their perimeter protection as a result of the enterprise IronMail solution.

In some cases, agencies benefited because additional functionality was provided, especially the end user quarantine feature. This feature provides users the ability to look at an email that IronMail has deemed spam and ensure a legitimate email was not blocked. If a legitimate email was blocked, you can release the quarantined message and "white list" the sender.



**Agencies receive numerous other benefits from this enterprise solution:**

### Zero Day Anti-Virus

IronMail leverages global threat intelligence from Trusted-Source to close the window of vulnerability that occurs between when an attack first emerges and when a signature is available.

### Anti-Phishing Protection

Phishers use spam to perpetuate fraud and identity theft. The best protection against phishing is to prevent fraudulent emails from ever getting to employee's inbox. The best anti-phishing defense is our anti-spam defense.

### Email Firewall and Intrusion Prevention

IronMail protects from known email attack techniques. Denial-of-service, directory harvest attacks, port scans and other attacks are blocked by the purpose-built, hardened IronMail appliance and never reach the network.

### How can you help reduce spam?

You can help reduce the amount of spam received by state government by forwarding spam emails to [spamreport@securecomputing.com](mailto:spamreport@securecomputing.com). Please forward the email as an attachment to preserve the header information. These emails help assist our spam vendor in updating blocking schemes to possibly prevent that type of spam from slipping through in the future.

Additionally, be extremely cautious about providing your state email address when signing up for anything on the Internet. Questionable sites will sell that information. Keeping your state email address for business use only will help minimize spam. Staying ahead of spammers is an ongoing "cat and mouse" game so your assistance is appreciated. For further information on IronMail, or any other PIM-related questions, please contact BCCS PIM Manager Rebecca Morgan at [rebecca.morgan@illinois.gov](mailto:rebecca.morgan@illinois.gov).

## Consolidation of Production Operations Services Yields New Efficiencies (continued from page 3)

Additionally, the consolidation has helped with the enterprise level implementation of Mobius, an online, on demand report viewing and distribution tool. The use of Mobius has helped DHS eliminate the need for the printing of over one million pages of generated report output on a monthly basis. It also provides excellent flexibility to users, enabling them to print only the pages of a report they actually need, such as summary pages, which users can print on a locally attached printer on a nearby Local Area Network (LAN) printer. Instead of having to wait for their printouts to be delivered, which can sometimes take two or three days, their reports will be waiting for them, on their PC, each morning when they report to work.

We encourage all Shared Services agencies to take advantage of everything that Mobius has to offer. When an agency production operations is consolidated we remove their printed output from the environment where it was formerly sent. Agencies now have two choices: pick up reports each day at the Harris facility or automatically send reports to their individual PC where the reports are waiting on the users when they arrive to work each day. This attractive selling point coupled with the savings accrued by not printing, storing, and disposing of the large volumes of printed output makes this choice even more attractive. BCCS works with agencies to get them set up in Mobius and teach them how to use it. To date, all of the agencies that have switched to the Mobius product have been pleased with how it helps them do their jobs.

For more information on Mobius contact Michael Hubert at 217-558-2317 or [michael.hubert@illinois.gov](mailto:michael.hubert@illinois.gov).